

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 12/17/2004

| APPLICATION NO |). | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|----------------|----------|------------------------|----------------------|-----------------------|------------------|--|
| 10/010,858 | | 12/05/2001 | Arumugam Manthiram | 05670P004 | 7142 | |
| 8791 | 7590 | 12/17/2004 | | EXAMINER | | |
| | | LOFF TAYLOR & OULEVARD | MARTIN, ANGELA J | | | |
| SEVENTI | I FLOOR | | | ART UNIT PAPER NUMBER | | |
| LOS ANG | ELES, CA | 90025-1030 | | 1745 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application | m No | | |
|---|--|---|--|-------------------|
| | Applicatio | | Applicant(s) | \bigcirc |
| Office Action Summar | 10/010,85 | 8 | MANTHIRAM ET | AL. |
| Jinos Alotton Guinniai | Examiner | | Art Unit | |
| The MAILING DATE CHI | Angela J. N | Martin | 1745 | |
| The MAILING DATE of this com or Reply | munication appears on the | cover sheet with the | correspondence ad | dress |
| ORTENED STATUTORY PERIC MAILING DATE OF THIS COMN asions of time may be available under the prov SIX (6) MONTHS from the mailing date of this period for reply specified above is less than the period for reply is specified above, the maximize to reply within the set or extended period for pely received by the Office later than three most patent term adjustment. See 37 CFR 1.704 | MUNICATION. visions of 37 CFR 1.136(a). In no ever s communication. hirty (30) days, a reply within the statut num statutory period will apply and will reply will, by statute, cause the application. | nt, however, may a reply be ti tory minimum of thirty (30) da expire SIX (6) MONTHS fron | imely filed ays will be considered timely in the mailing date of this co | , mmunication. |
| | · , | | | |
| Responsive to communication(s | s) filed on 22 November 20. | 04 | | |
| This action is FINAL . | 2b)⊠ This action is no | | | |
| Since this application is in condi | ition for allowance except for | mu. Or formal matters or | occoution as to the | |
| closed in accordance with the pr | ractice under Fx narte Oue | vie 1935 CD 11 4 | 53 O.C. 242 | merits is |
| on of Claims | Suradi En parto Qua | بر. از بر. از برد. از | JJ U.G. 213. | |
| | | | | |
| Claim(s) <u>1-30</u> is/are pending in t | | | | |
| la) Of the above claim(s) <u>4,5,7-1</u> | <u>1,13-24 and 26-30</u> is/are w | vithdrawn from consi | ideration. | |
| Claim(s) is/are allowed. | | | | |
| Claim(s) <u>1-3,6,12 and 25</u> is/are r | | | | |
| Claim(s) is/are objected to | | | | |
| Claim(s) are subject to re | striction and/or election req | Juirement. | | |
| on Papers | | | | |
| he specification is objected to by | v the Evaminer | | | |
| he drawing(s) filed on is/a | are: a) accepted or b) | labiaatadta kuul r | | |
| Applicant may not request that any o | hiection to the drawing(a) ha | objected to by the E | =xaminer. | |
| Applicant may not request that any or Replacement drawing sheet(s) includes | ding the correction in the diaming(s) be | ileid in abeyance. See | 37 CFR 1.85(a). | |
| Replacement drawing sheet(s) include the oath or declaration is objected. | any the correction is required | ıτ the drawing(s) is obj | ected to. See 37 CFF | ₹ 1.121(d). |
| he oath or declaration is objecte | u to by tile Examiner. Note | tne attached Office | Action or form PTC |)-152. |
| der 35 U.S.C. § 119 | | | | |
| cknowledgment is made of a cla | im for foreign priority unde | r 35 U.S.C 8 119/a) | -(d) or (f) | |
|] All b) ☐ Some * c) ☐ None of | f: | | (d) 01 (1). | |
| . Certified copies of the prior | rity documents have been r | eceived: | | |
| Certified copies of the prior | ity documents have been r | eceived in Application | on No | |
| . Copies of the certified copie | es of the priority document | s have been receive | d in this National C | . |
| application from the Interna | ational Bureau (PCT Rule 1 | 7 2(a)) | u iii tiiis ivational Si | age |
| e the attached detailed Office ac | ction for a list of the certified | d conies not receive | d | |
| | · | a copies not received | J. | |
| | | | | |
|) | | | | |
| of References Cited (PTO-892) | 4) | ☐ Interview Summary (I | PTO-413) | |
| of Draftsperson's Patent Drawing Review | | Paper No(s)/Mail Date | e | |
| o(s)/Mail Date <u>6/03,2/02,12/01.</u> | | Notice of Informal Pa Other: Other: Other Other Notice of Informal Pa Notice of Information Pa Notice of Informa | tent Application (PTO-1 | 52) |
| mark Office | | | | |
| of Draftsperson's Patent Drawing Review Statement(s) (PTO-1449 O(s)/Mail Date <u>6/03,2/02,12/01</u> . | | Paper No(s)/Mail Date Notice of Informal Pa Other: . | e | |

Art Unit: 1745

DETAILED ACTION

Election/Restrictions

- 1. Claims 4, 5, 7-11, 13-24, 26-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected method and species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 11, 2004.
- 2. Applicant's election with traverse of claims 1, 2, 3, 6, 10, 12, 13, 18, 20, 25, and 30 in the reply filed on August 11, 2004 is acknowledged. The traversal is on the ground(s) that "examination of claims 1-30 on the merits would impose no additional burden on the Patent Office". This is not found persuasive because the inventions of Group I and Group II are distinct, and the previously described species are distinct. In addition, elected claims 10, 13, 18, 20, and 30 must be withdrawn because they have a different species (claims 10, 18, 20, and 30 include Mn in the modification material; claim 13 is dependent on non-elected claim 11) than that elected by the Applicant.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Application/Control Number: 10/010,858

Art Unit: 1745

4. Claims 1-3, 6, 12 are rejected under 35 U.S.C. 102(a) as being anticipated by Park et al., J. Electrochem. Society.

Rejection of claims 1-3, 6, 12 drawn to an electrode material.

Park et al., teach an electrode material comprising a surface/chemically modified positive electrode (cathode) material, wherein the modification is ceramic (abstract). It teaches the composition wherein the modification is LixNi1-yCoyO2, when x=1 and y=1 (LiCoO2) (abstract) and the positive electrode material is LiMn2O4 (abstract). It teaches the modification is LixNi1-yCoyO2, when x=1 and y=1 (LiCoO2)(abstract).

Thus, the claims are anticipated.

5. Claim 25 is rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Park et al., J. Electrochem. Society.

Rejection of claim 25 drawn to an electrode material.

Park et al., teach an electrode material comprising a surface/chemically modified LiMn2O4 spinel oxide (abstract). Claim 25 is a product-by-process claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Thus, the claim is anticipated.

However, if the claim is not anticipated, in the alternative, it is obvious because Park et al., teach the same product as in the Application.

Art Unit: 1745

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cho et al., Electrochem. and Solid-State Letters, teach a LiMn2O4 cathode coated with LiCoO2.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela J. Martin whose telephone number is 571-272-1288. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AJM